

# Work Order ID 59188

Thursday, May 27, 2010 1:21:07 PM



Page 1

Item ID: D3838-042

Accept



Setup Start



Revision ID:

Item Name: Rib Assembly (Basket Lid, RH)

Stop



Start Date: 5/27/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 6/4/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

Date: 10-5-27

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



| Sequence ID/<br>Work Center ID | Operation<br>Description   | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr                       | Revision Nbr   |                      |         |        |              |               |               |                  |                |
| D3838                          | Rev A  |                      |         |        |              |               |               |                  |                |
| 100                            | Large Fab  | 0.00                 |         |        |              |               |               |                  |                |
| Large Fab                      | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Large Fab                      | 1- cut D3838-2 and D3838-3 rib as per dwg D3838  |                      |         |        |              |               |               |                  |                |
|                                | 2- remove identification markings  |                      |         |        |              |               |               |                  |                |
|                                | 3- deburr  |                      |         |        |              |               |               |                  |                |
|                                | 4- weld D3838-2 to D3838-3 and drill hole (3/16") using DT9437 jig and open to finish size as per dwg D3838<br>A/R ER316 S.S. Rod Batch: 4108775 |                      |         |        |              |               |               |                  |                |
|                                | 5- c'sink hole as per dwg  |                      |         |        |              |               |               |                  |                |
|                                | 6- grind weld flush where indicated on dwg D3838   |                      |         |        |              |               |               |                  |                |
|                                | 7- weld D3759-1 bushing as per dwg D3838<br>A/R ER316 S.S. Rod Batch: 4108775  |                      |         |        |              |               |               |                  |                |
|                                | 8- grind bushing weld flush as per dwg dwg D3838   |                      |         |        |              |               |               |                  |                |
|                                | 9- deburr hole if necessary  |                      |         |        |              |               |               |                  |                |

② 10.06.10

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |



**NOTE:** Date & initial all entries




**Work Order ID 59188**

Thursday, May 27, 2010 1:21:07 PM

Page 2

|                |                               |            |   |       |       |   |
|----------------|-------------------------------|------------|---|-------|-------|---|
| Item ID:       | D3838-042                     | Accept     |  | Setup | Start |  |
| Revision ID:   |                               |            |   |       |       |   |
| Item Name:     | Rib Assembly (Basket Lid, RH) |            |   |       | Stop  |  |
| Start Date:    | 5/27/2010                     | Start Qty: | 2.00  |       |       |   |
| Required Date: | 6/4/2010                      | Req'd Qty: | 2.00  |       |       |   |
| Reference:     |                               |            |   |       |       |   |
|                |                               |            |   |       |       |   |

|            |               |       |            |       |     |       |   |
|------------|---------------|-------|------------|-------|-----|-------|---|
| Approvals: | Process Plan: | Date: | Tooling:   | Date: | Run | Start |  |
|            | QC:           | Date: | SPC (Y/N): | Date: |     | Stop  |  |

| Sequence ID/<br>Work Center ID  | Operation<br>Description                                    | Set Up/<br>Run Hours | Tool ID | Tool #       | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|---|---|----------------------|---------|--------------|--------------|---------------|---------------|------------------|----------------|
| 110<br><br>QC<br>Quality Control    | QC5- Inspect part completeness to step on W/O<br><br>Memo   | 0.00<br><br>0.00     |         | S wheel      |              | 2<br>-042     |               |                  |                |
| 120<br><br>QC<br>Quality Control    | QC9- Inspect visual per QSI004- Fusion Welds<br><br>Memo    | 0.00<br><br>0.00     |         |              |              |               |               |                  | PL 10-06-10    |
| 130<br><br>Packaging<br>Packaging | Identify as per dwg & Stock Location: <u>WA</u><br><br>Memo | 0.00<br><br>0.00     |         | SAD 10-06-10 |              | 2             |               |                  |                |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

NOTE: Date & initial all entries

**Work Order ID 59188**

Thursday, May 27, 2010 1:21:07 PM

Page 3

Item ID: D3838-042

Accept

Setup Start

Revision ID:

Stop

Item Name: Rib Assembly (Basket Lid, RH)

Start Date: 5/27/2010 Start Qty: 2.00

Cust Item ID:

Required Date: 6/4/2010 Req'd Qty: 2.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/06/11

MSF

10-6-10

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                                |                                 |                |                           |                       |                          |
|------|------|----------------------------------|--------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action<br>Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng           | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |
|      |      |                                  |                                |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Thursday, May 27, 2010 1:21:10 PM

Page 1

Work Order ID: 59188

Parent Item: D3838-042

Parent Item Name: Rib Assembly (Basket Lid, RH)


Comments: IPP Rev:A 08-12-01 new issue DD verified by:EC

Start Date: 5/27/2010

Required Date: 6/4/2010

Start Qty: 2.00

Required Qty: 2.00

| Component Item ID/<br>Item Name   | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D3759-1<br><br>Bushing |                        | Manufactured  | No          |                     |                  | 100             | Each               | 114.0000       | 1           | 2            |               | 10.06.10       |        |

Location

Loc Qty

Loc Code

WA

114

54072

9

58159

1

58256

26

58581

42

58672

36

M304TS0.750W.065

Purchased

No

100

f

1,187.136

1.0317

2.172



304 SQ Tube .75x.75x.065W

Location

Loc Qty

Loc Code

MAT

187.1361

112398

0

114482

187.1361

WA

1000

114520

1000

2110

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

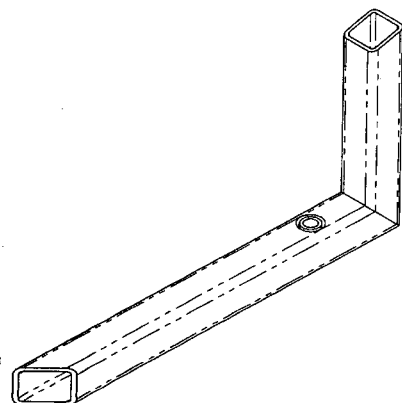
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

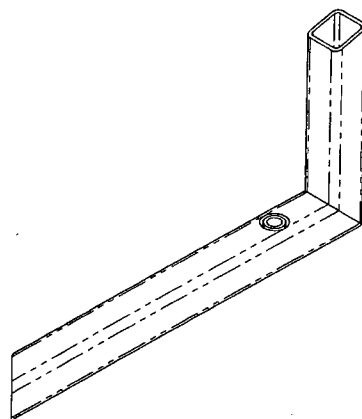
| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries





**D3838-041 RIB ASSY (BASKET LID, LH)**



**D3838-042 RIB ASSY (BASKET LID, RH)**

| ITEM | QTY<br>-041 | QTY<br>-042 | P/N       | DESCRIPTION               |
|------|-------------|-------------|-----------|---------------------------|
| 1    | X           |             | D3838-041 | RIB ASSY (BASKET LID, LH) |
| 2    |             | X           | D3838-042 | RIB ASSY (BASKET LID, RH) |
| 3    | 1           | 1           | D3759-1   | BUSHING                   |
| 4    | 1           |             | D3838-1   | RIB                       |
| 5    |             | 1           | D3838-2   | RIB                       |
| 6    | 1           | 1           | D3838-3   | RIB                       |

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER

NO. 59185  
BS 10-5-27

**RELEASED**  
08/11/08

- NOTES:  
1) MATERIAL: N/A  
2) FINISH: NONE  
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) UNITS: INCHES UNLESS OTHERWISE NOTED  
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX  
6) IDENTIFICATION: N/A  
7) WEIGHT: 0.54 lbs

|            |           |             |    |          |
|------------|-----------|-------------|----|----------|
| A          | NEW ISSUE | DESCRIPTION | MB | 08.10.08 |
| REV.       |           |             | BY | DATE     |
| DESIGN     |           |             |    |          |
| DRAWN      |           |             |    |          |
| CHECKED    |           |             |    |          |
| MFG. APPR. |           |             |    |          |
| APPROVED   |           |             |    |          |
| DE APPR.   |           |             |    |          |
| DATE       | 08.10.08  |             |    |          |

|  |              |        |
|--|--------------|--------|
| DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA  |              | REV. A |
| DRAWING NO.<br>D3838   | SHEET 1 OF 3 |        |
| TITLE<br>RIB ASSY (BASKET LID)   | SCALE<br>NTS |        |
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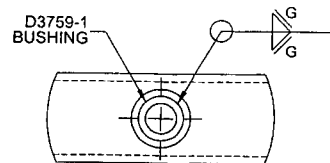
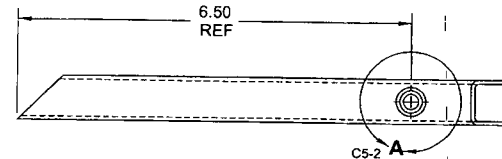
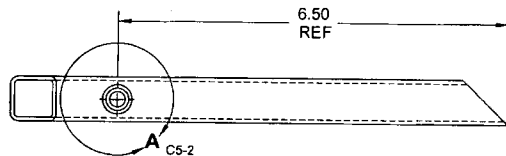
| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

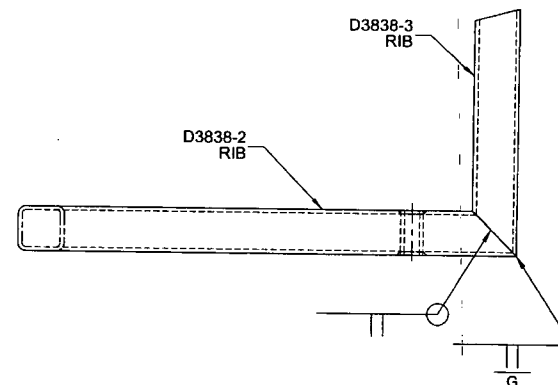
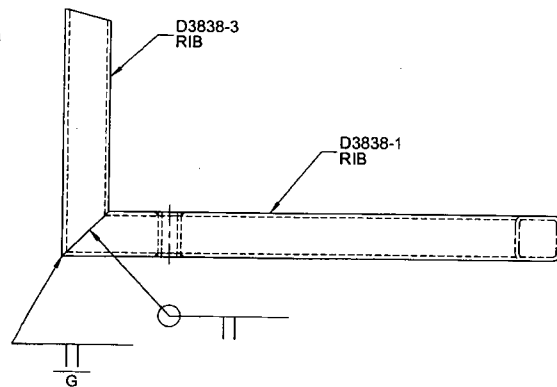
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



**DETAIL A**  
D2-2  
D7-2 SCALE 2X



**D3838-041 RIB ASSY (BASKET LID, LH)**

**D3838-042 RIB ASSY (BASKET LID, LH)**

**RELEASED**  
*08/10/08*

*WLO 59188*

|            |                 |   |              |
|------------|-----------------|---|--------------|
| DESIGN     |                 | <b>DART AEROSPACE LTD</b>   |              |
| DRAWN      |                 | HAWKESBURY, ONTARIO, CANADA   |              |
| CHECKED    | <i>SS</i>       | DRAWING NO.   | REV. A       |
| MFG. APPR. | <i>SS</i>       | <b>D3838</b>  | SHEET 2 OF 3 |
| APPROVED   | <i>SS</i>       | TITLE   | SCALE        |
| DE APPR.   | <i>SS</i>       | <b>RIB ASSY (BASKET LID)</b>  | NTS          |
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| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

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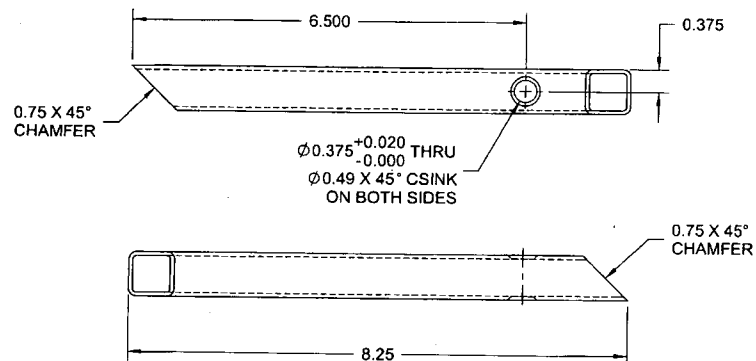
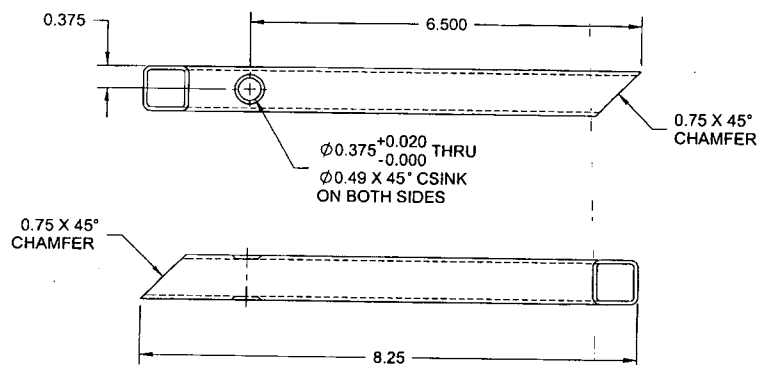
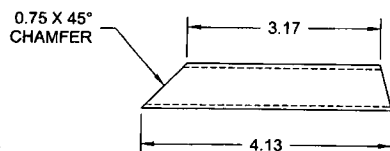
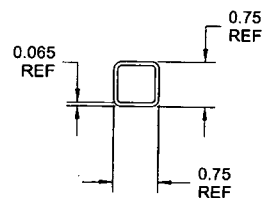
4

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1

D

**D3838-1 RIB****D3838-2 RIB****D3838-3 RIB****TYPICAL SECTION VIEW**

w/o 59188

**RELEASED****NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.065 WALL  
REF. DART SPEC. M304TS0.750W0.065
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D3836-1/2 = 0.35 lbs EACH; D3836-3 = 0.19 lbs

|  |          |  |              |
|--|----------|--|--------------|
| DESIGN   |          | <b>DART AEROSPACE LTD</b>              |              |
| DRAWN  |          | HAWKESBURY, ONTARIO, CANADA            |              |
| CHECKED  |          | DRAWING NO.                            | REV. A       |
| MFG. APPR.   |          | D3838                                  | SHEET 3 OF 3 |
| APPROVED   |          | TITLE                                  | SCALE        |
| DE APPR.   |          | RIB ASSY (BASKET LID)                  | NTS          |
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3

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1

A

A

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries